

FIG. 1A

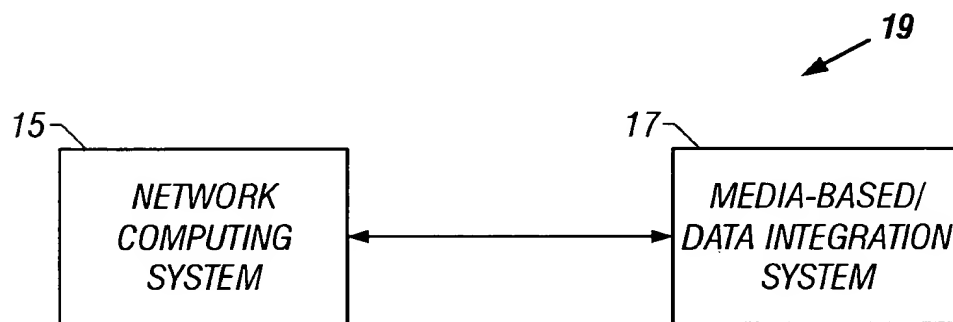
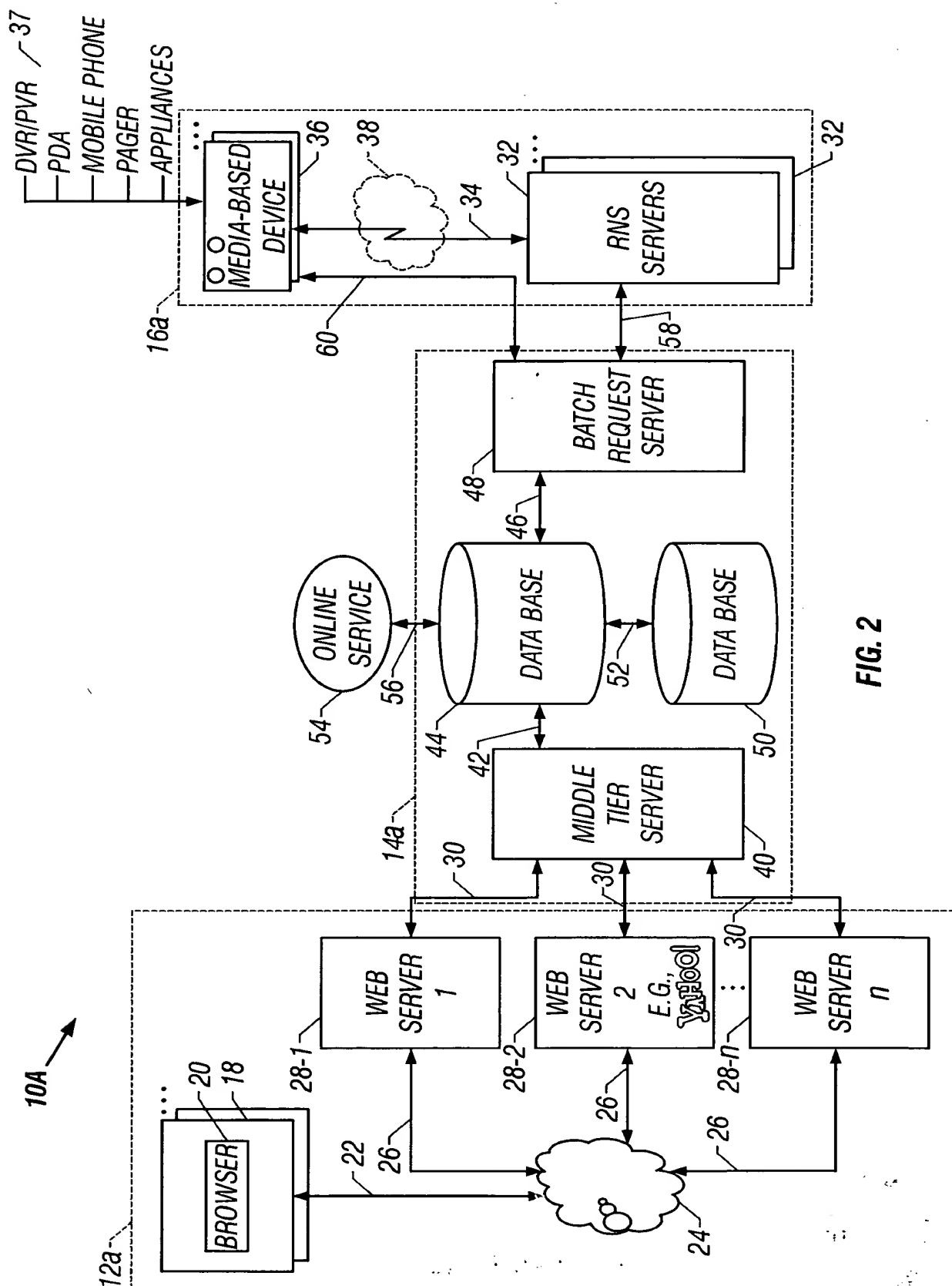


FIG. 1B



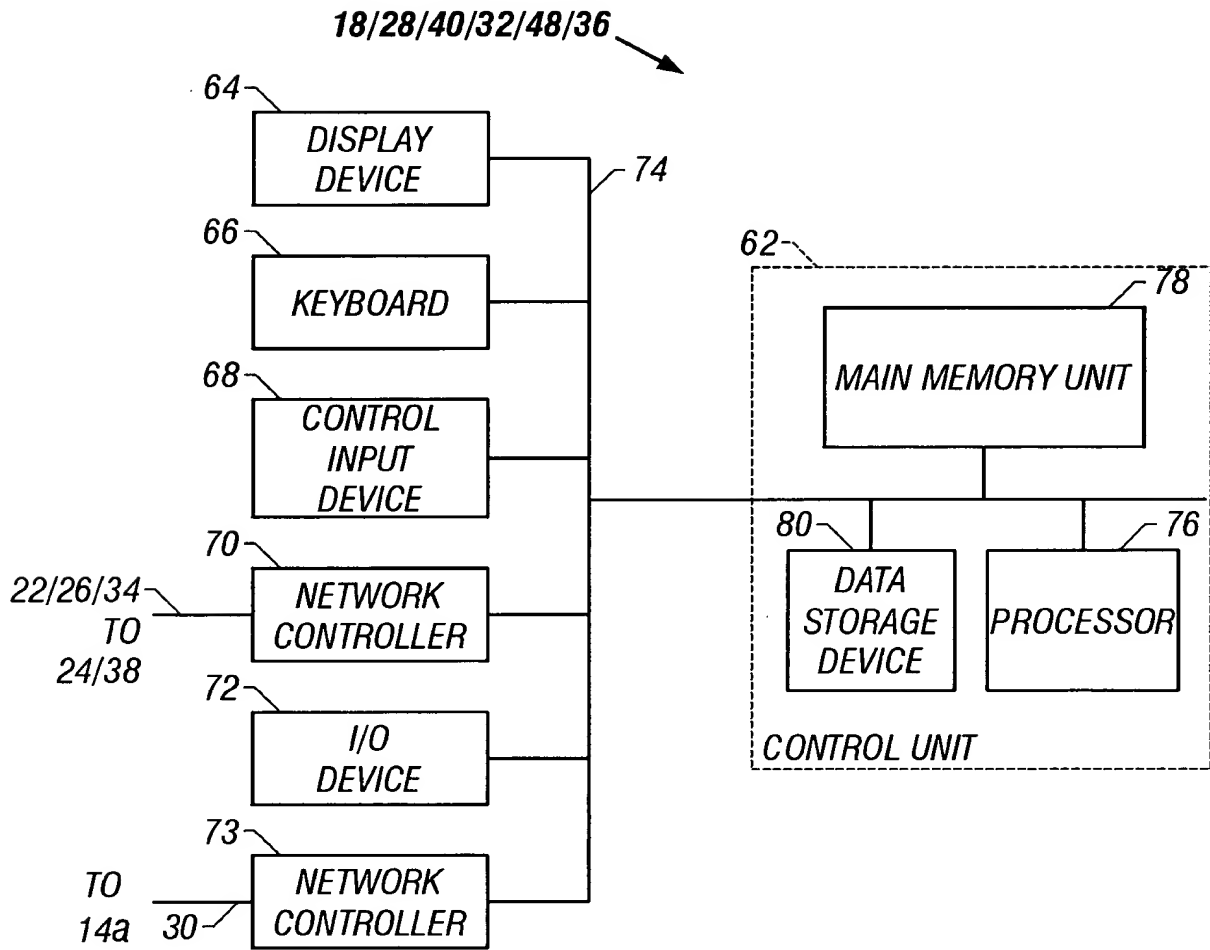


FIG. 3

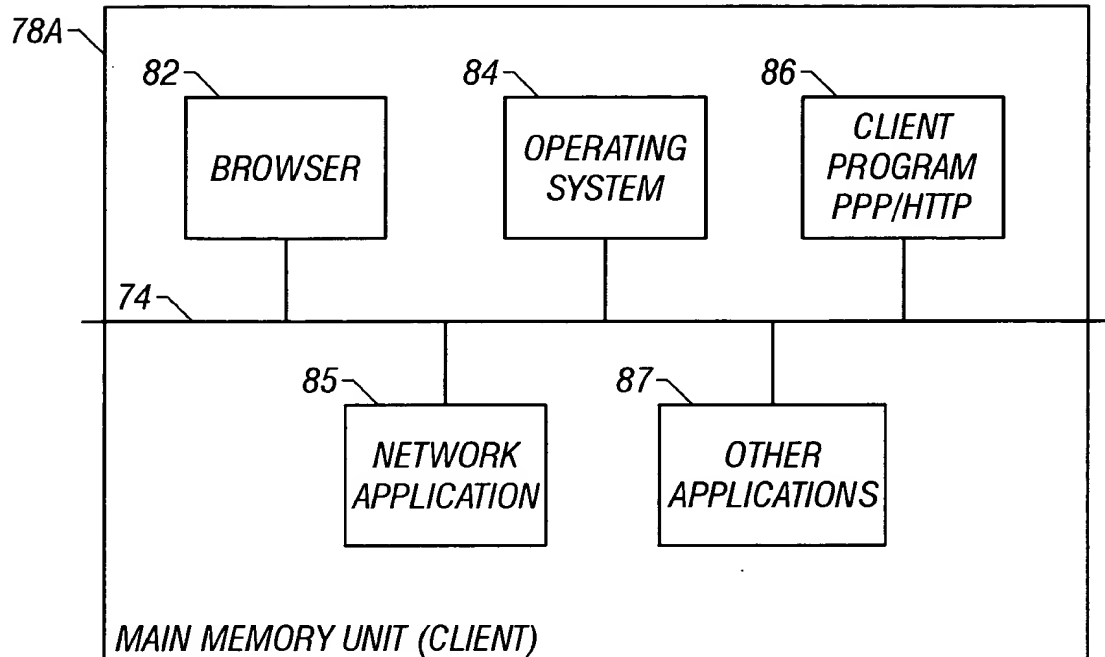


FIG. 4A

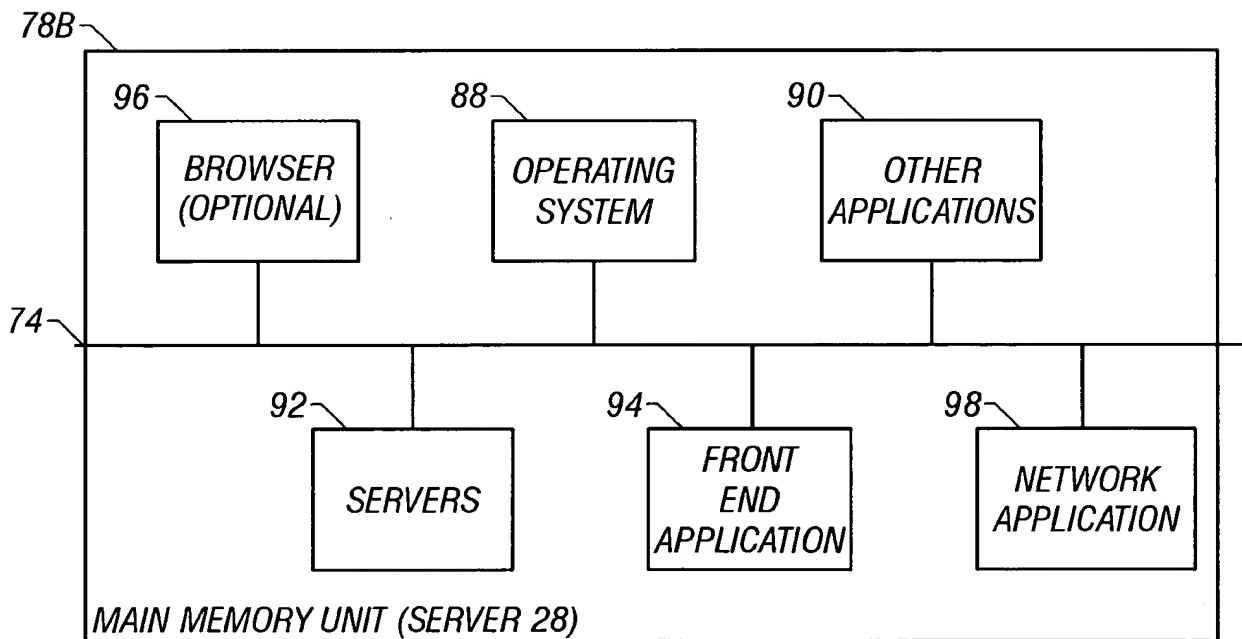


FIG. 4B

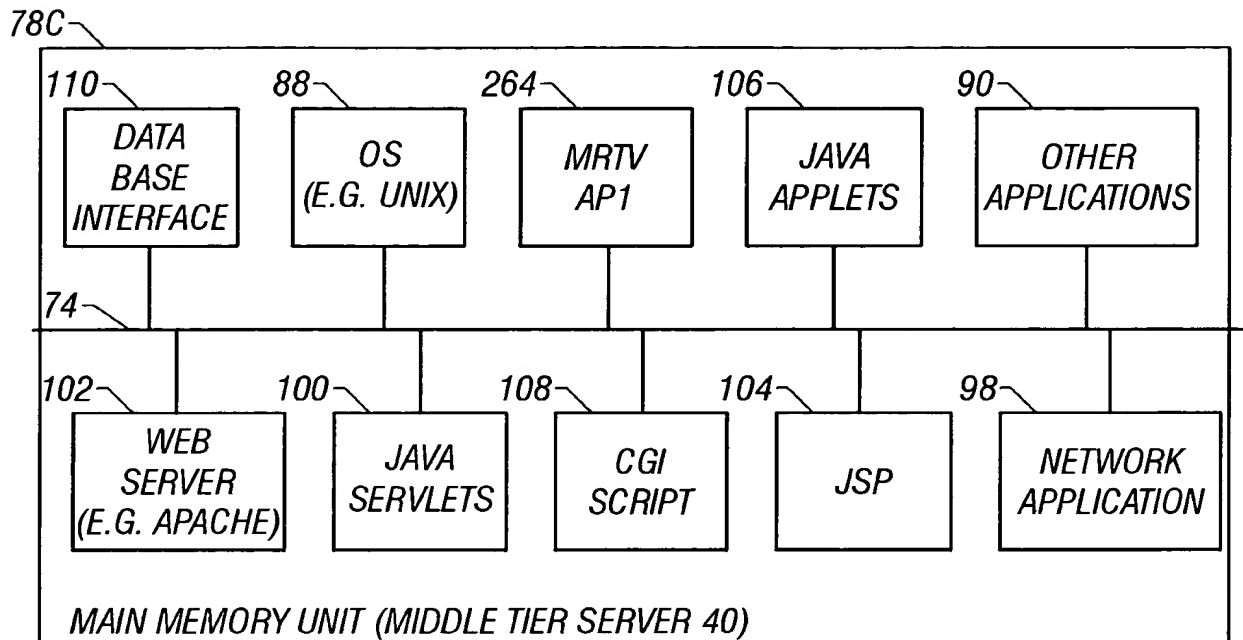


FIG. 4C

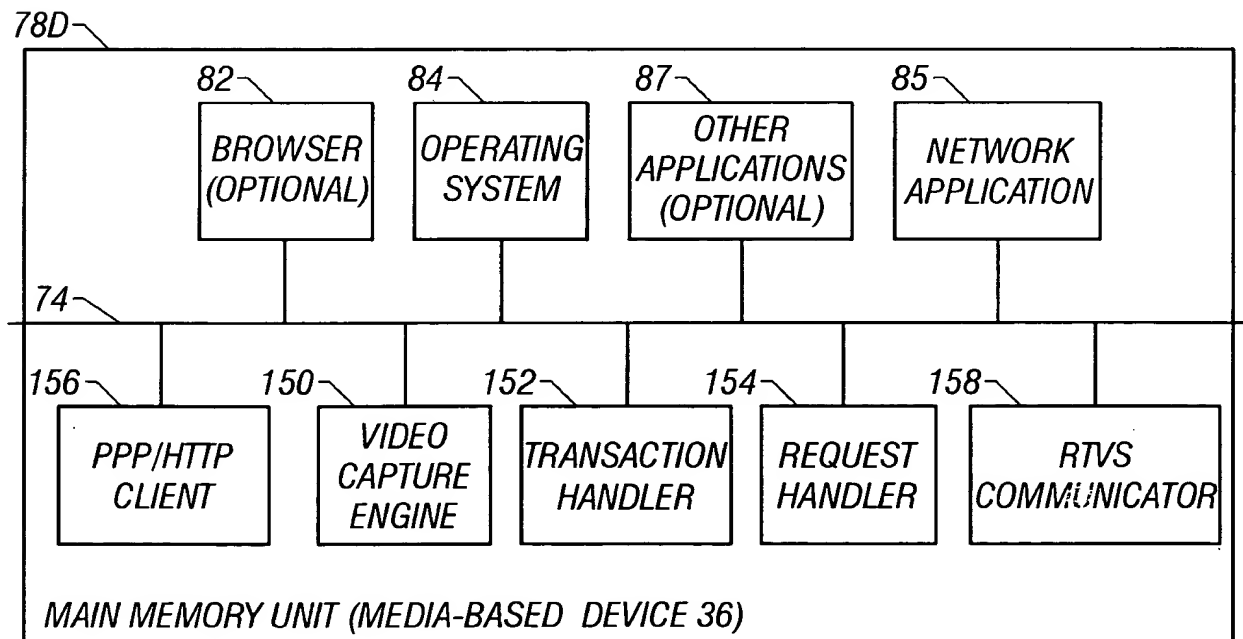


FIG. 4D

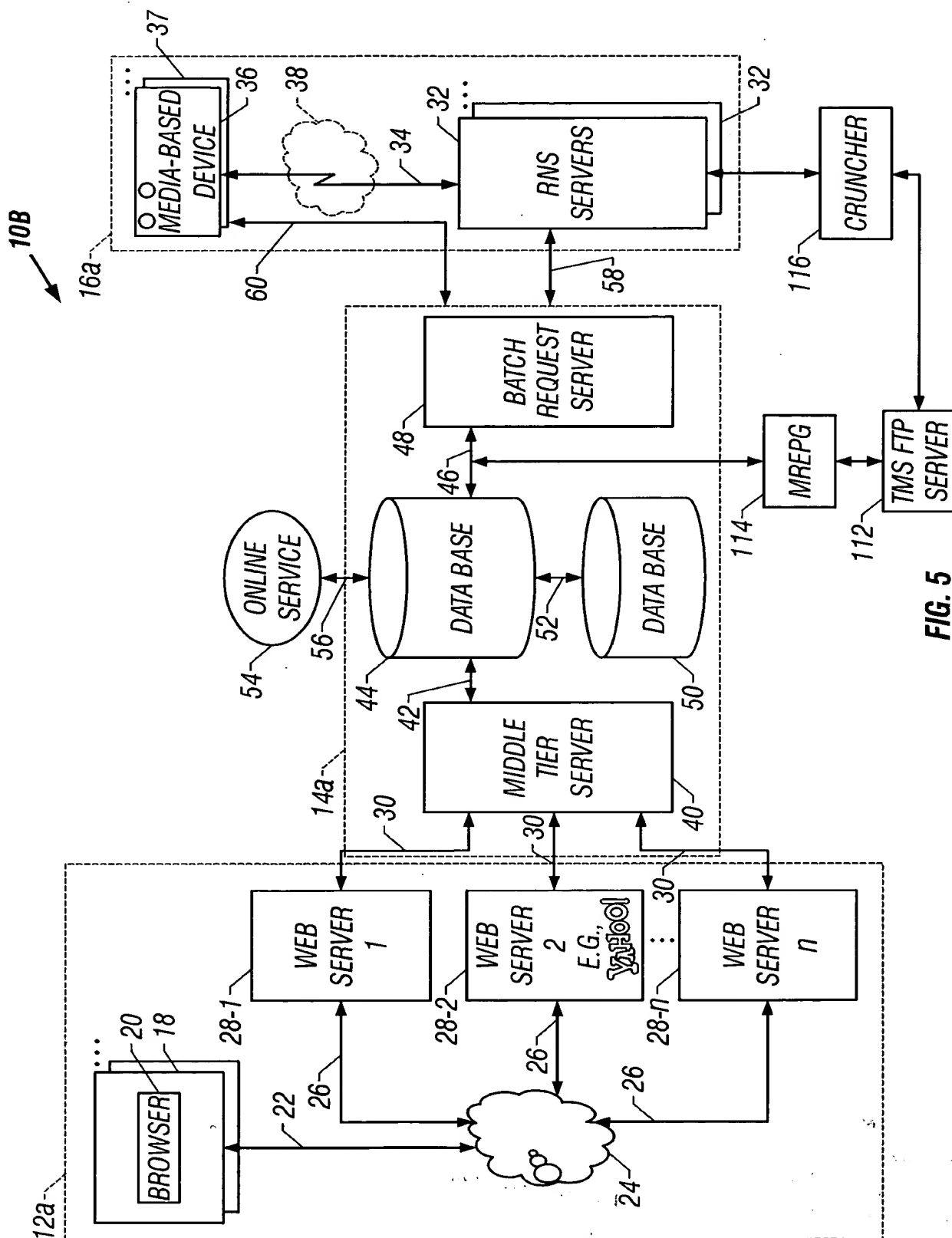


FIG. 5

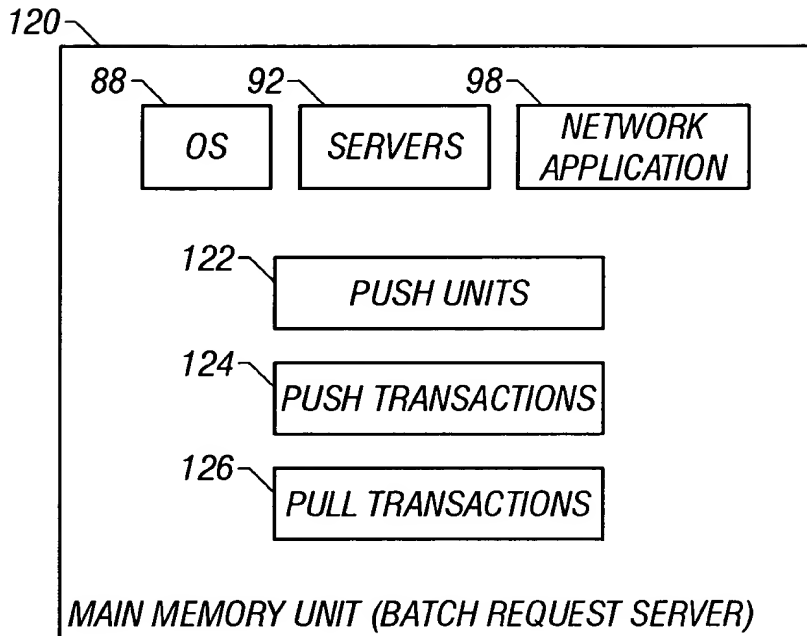


FIG. 6

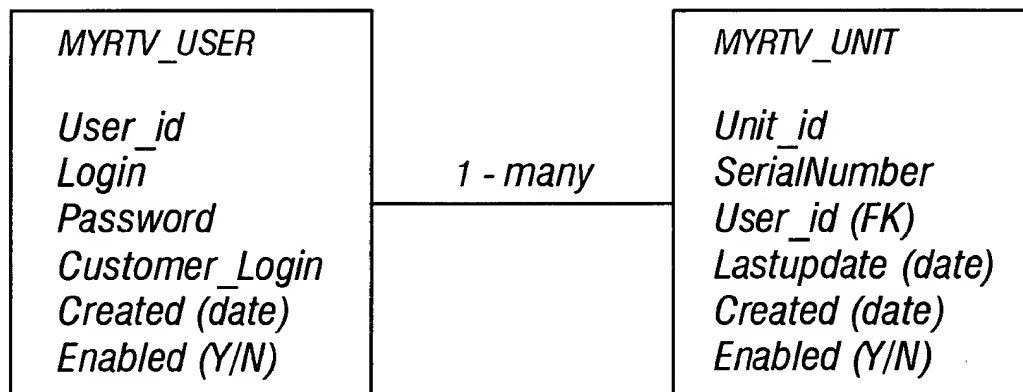


FIG. 7

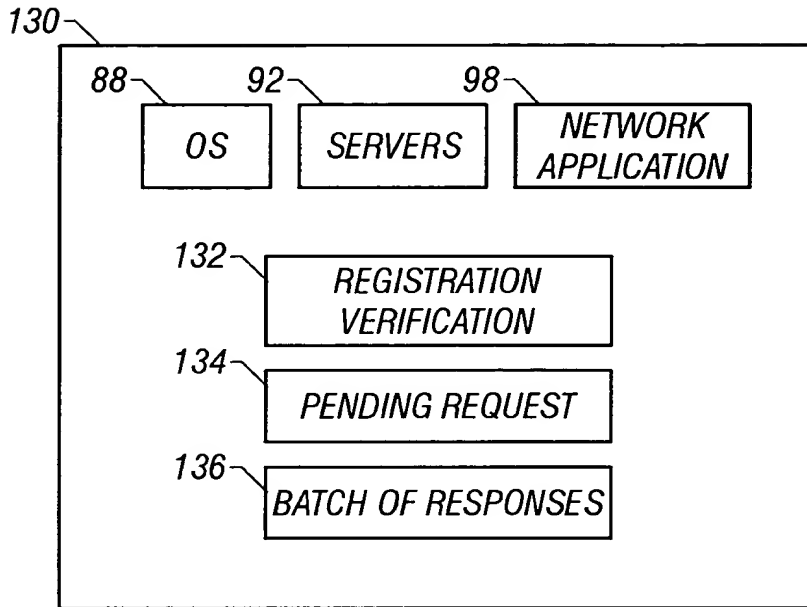


FIG. 8

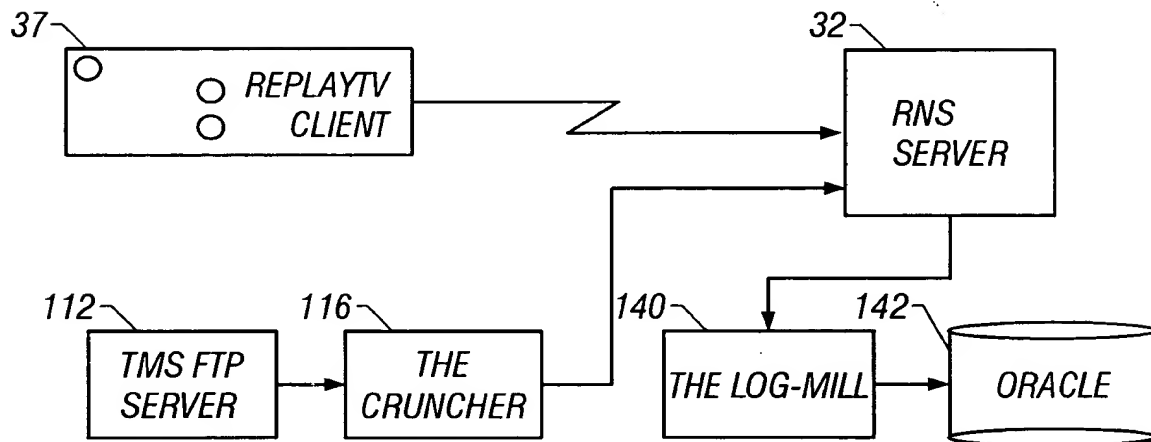


FIG. 9

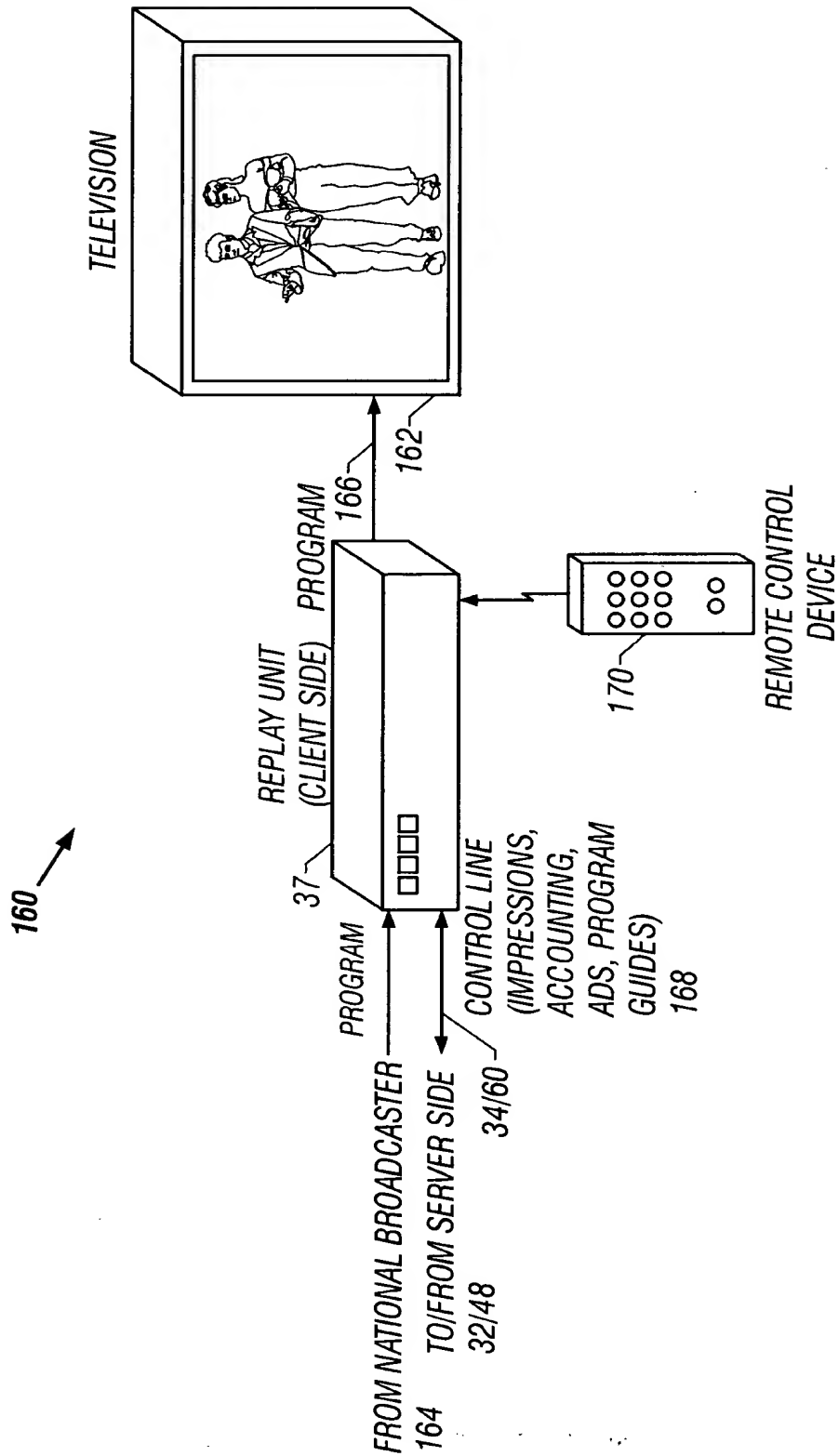


FIG. 10

180

my **(r)** **replaytv**

Marketing/promotional information

user name:

Sign on

182

password:

184

☐ remember my password


[I forgot my password](#)

[Register](#)

[Are you a new user to the myreplaytv webase?](#)

[Help](#) [Contact us](#)

FIG. 11

my  replaytv

Channel Guide

Replay Guide

Find Shows

Manual Record

Preferences

Help

Logout

Channel Guide

Today 03/06

6 pm

0 OXYGEN

GO

195

197

194

196

198

200

Tue 3/06

6:00 PM

6:30 PM

7:00 PM

7:30 PM

204

202

0 OXYGEN	An Officer and a Gentleman			
1 IN1	Me, Myself & Irene		Scary Movie	
2 KTVU	6 O'Clock Ne...	Spin City	Seinfeld	Spin City
3 LOOR003	Local Origination		Local Origination	
4 KRON	NewsCenter 4 at 6		Frasier	Entertainmen...
5 KPIX	CBS News	Channel 5 Ey...	Evening Maga...	Hollywood Sq...
6 KICU	Home Improve...	The Nanny	Family Feud	Family Feud
7 KGO	ABC 7 News at 6pm		Jeopardy!	Wheel of For...
8 KTSF	TV Patrol	Balita...	Little Saigo	Mandarin New...
9 KQED	Zoboomafoo	Nightly Busi...	The NewsHour With Jim Le...	
10 KTEH	BBC World Ne...	French Field...	Antiques Roa...	EastEnders
11 TVGOS	TV Guide		TV Guide	
12 KBHK	The Simpsons	3rd Rock Fro...	Friends	Friends
13 KBWB	The Drew Car...	Divorce Cour...	Power of Att...	The Drew Car...
14 KDTV	Noticias 14	Noticiero Un...	Carita de Angel	

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FIG. 12A

View Description	2 KTUV ▽	Yesterday 8/17	4 PM ▽	1-15 ▽
Record	4 KRON	Today 8/18 ▽	5 PM	16-30
Record all episodes	5 KPIX	SAT 8/19	6 PM	31-45
Record + change options	6 FAM	SUN 8/20	7 PM	46-60
Find all episodes	7 KGO	MON 8/21	8 PM	61-75
Close	8 KRCB	TUE 8/22	9 PM	76-90
218	9 KQED	WED 8/23	10 PM	91-105
View Description	10 KDTV	THU 8/24	11 PM	106-120
Find all episodes	11 KICU	FRI 8/25	12 AM	121-145
Turn off recording	12 KBHK	212	214	146
Change record options	13 KBWB	216		
Close	14 CNN			
220	15 DISN			
	16 QV			
View Description	View Description			
Record	Record			
Record all episodes	Record future episodes			
Record + change options	Record + change options			
Find all episodes	Find all episodes			
Close	Why can't I record?			
218	Close			
View Description	222			
Find all episodes				
Turn off recording				
Change record options				
Close				
220				

FIG. 12B

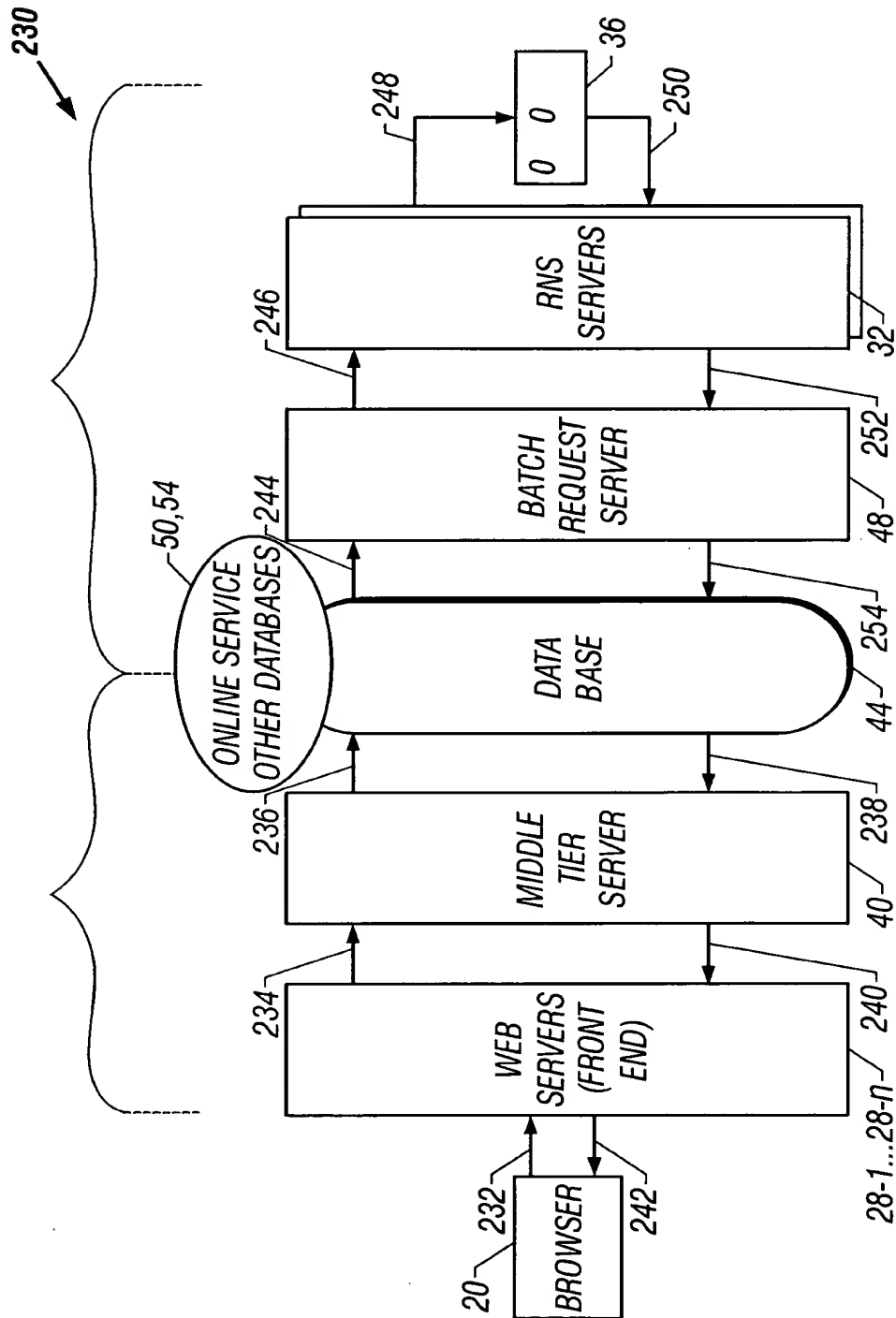


FIG. 13A

SEQUENCE DIAGRAM

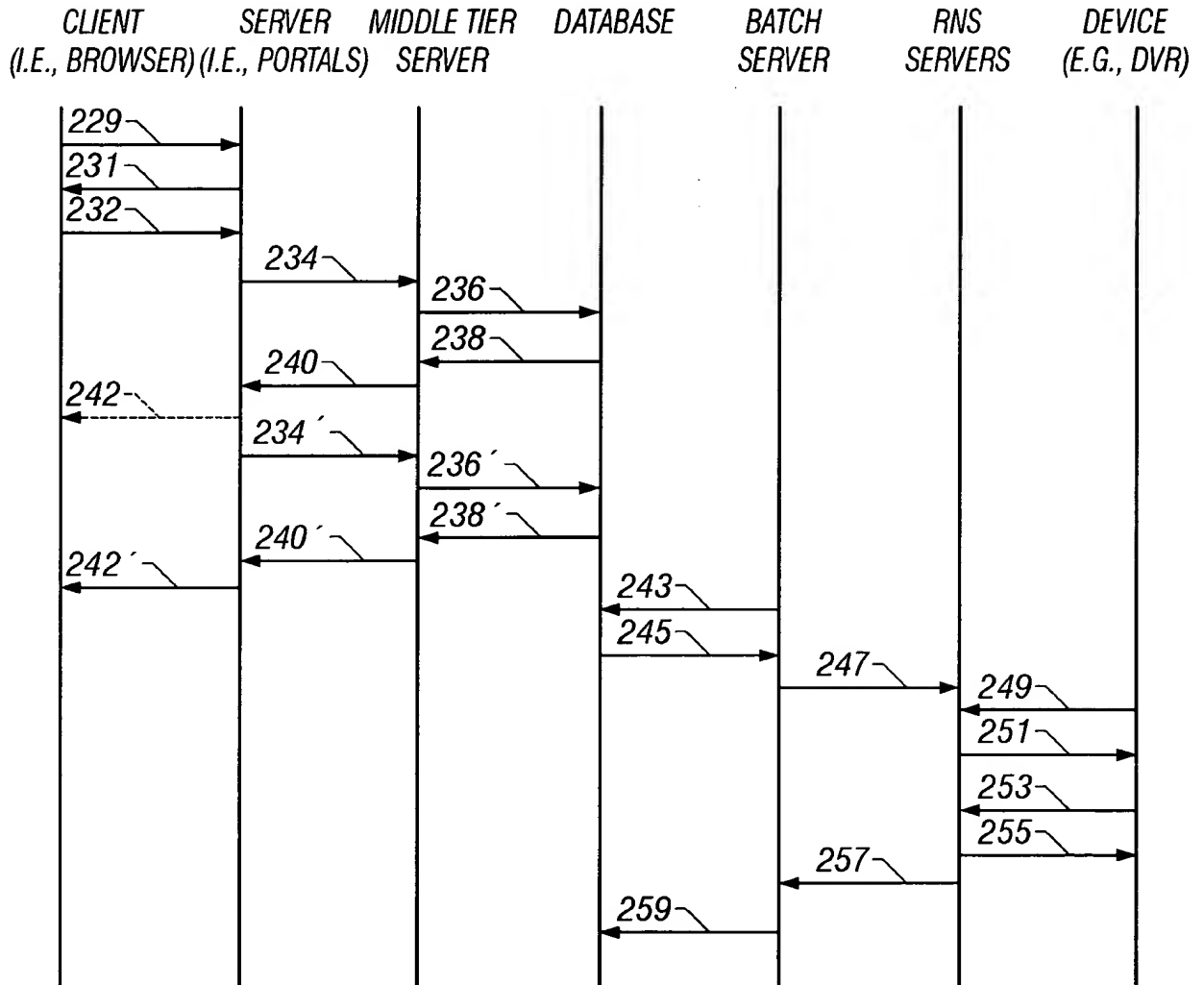


FIG. 13B

<i>API Routine</i>	<i>Function</i>
<i>CreateAccount</i>	<i>Creates an account for a new user based on the information received</i>
<i>Login</i>	<i>Tries to authenticate a user based on the input username and password combination</i>
<i>GetProfile</i>	<i>Returns the profile of the user and his units based on his userid</i>
<i>AddRequest</i>	<i>Adds a request to the unit's list of pending requests based on a set of request parameters, and returns the full status of the unit and of the pending requests, including those for recording specified show(s) and deleting recorded show(s)</i>
<i>DeleteRequest</i>	<i>Delete a request from the user list of pending requests</i>
<i>GetReplayGuide</i>	<i>Returns the Replay Guide of the unit as saved in the appropriate database for the specified unit</i>
<i>GetChannelLineUp</i>	<i>Returns the channel lineup of the unit based on the unit's setting</i>
<i>ChangePassword</i>	<i>Lets the user changes his password</i>
<i>GetEPG</i>	<i>Returns the current electronic program guide for the unit based on the settings of the unit</i>
<i>ShowGuide</i>	<i>Returns detailed information about a specified show or search show details for particular shows based on criteria given as parameters</i>

FIG. 14

API Routine	Input Parameters	Output Files (Corresponding XML elements)
CreateAccount	firstname, lastname, address1, address2, city, state, zipcode, serialnumber, login, password, creator	ACCOUNT.XML REPLAYERROR.XML
Login	login, password	ACCOUNT.XML REPLAYERROR.XML
GetProfile	userid	PROFILE.XML (USERINFO, UNITINFO-I) REPLAYERROR.XML
AddRequest	userid, unitid, reqtype(none, show, theme, update) <u>reqtype=show</u> : showtype(single, repeat, manual single, manual repeat), headendid, tmsid, device, starttimegmt, name, durationinminutes, inputsource, quality, guaranteedrecord, numepisodes, weekdayflags, earlstartminutes, showguarminutes <u>reqtype=theme</u> : searchterm, searchflags, suzukiid, durationinminutes, quality, guaranteedrecord <u>reqtype=update</u> : updatetype(deleteshow, preserveshow, deletechannel), channelid, showid	UNITSTATUS.XML (UNITINFO, REQUESTSTATUS-I) REPLAYERROR.XML *Note: REQUESTSTATUS Result = (PENDING, SENT, SUCCESS, GENERAL FAILURE, SCHEDULEFAILURE, ROOMFAILURE)
DeleteRequest	userid, unitid, requestid	DELETERESULT.XML REPLAYERROR.XML
GetReplayGuide	userid, unitid	GUIDE.XML (REPLAYCHANNEL-I) REPLAYERROR.XML *Note: REPLAYCHANNEL Type = (SINGLE, SINGLEMANUAL, REPEAT, REPEATMANUAL, THEME, THEMEEXACT, ZONE)
GetChannelLineUp	userid, unitid	CHANNELLINEUP.XML (CHANNEL-I) REPLAYERROR.XML
ChangePassword	userid, currentpassword, newpassword	ACCOUNT.XML REPLAYERROR.XML
GetEPG	userid, unitid, starttimegmt, durationinminutes, startchannel, channelcount	XML file based on tvguide.dtd & tvprograms.dtd REPLAYERROR.XML
ShowGuide	userid, unitid, query, start, count, levelofdetail *Note: query keywords include actor, advisory, desc, mpaarating, title, etc.	XML file based on tvguide.dtd & tvprograms.dtd REPLAYERROR.XML

FIG. 15

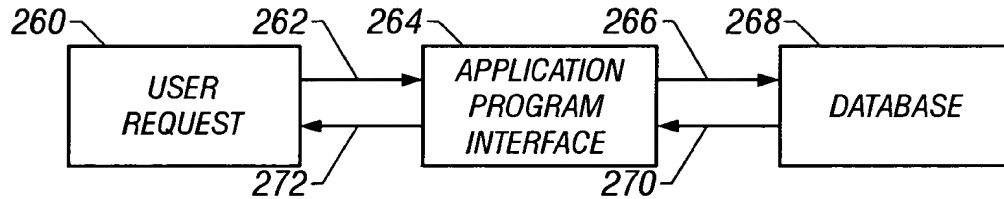


FIG. 16A

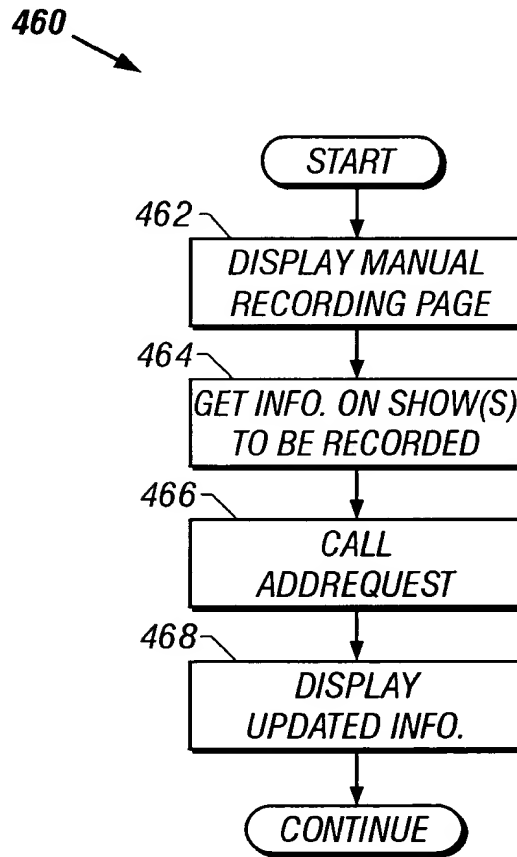


FIG. 25

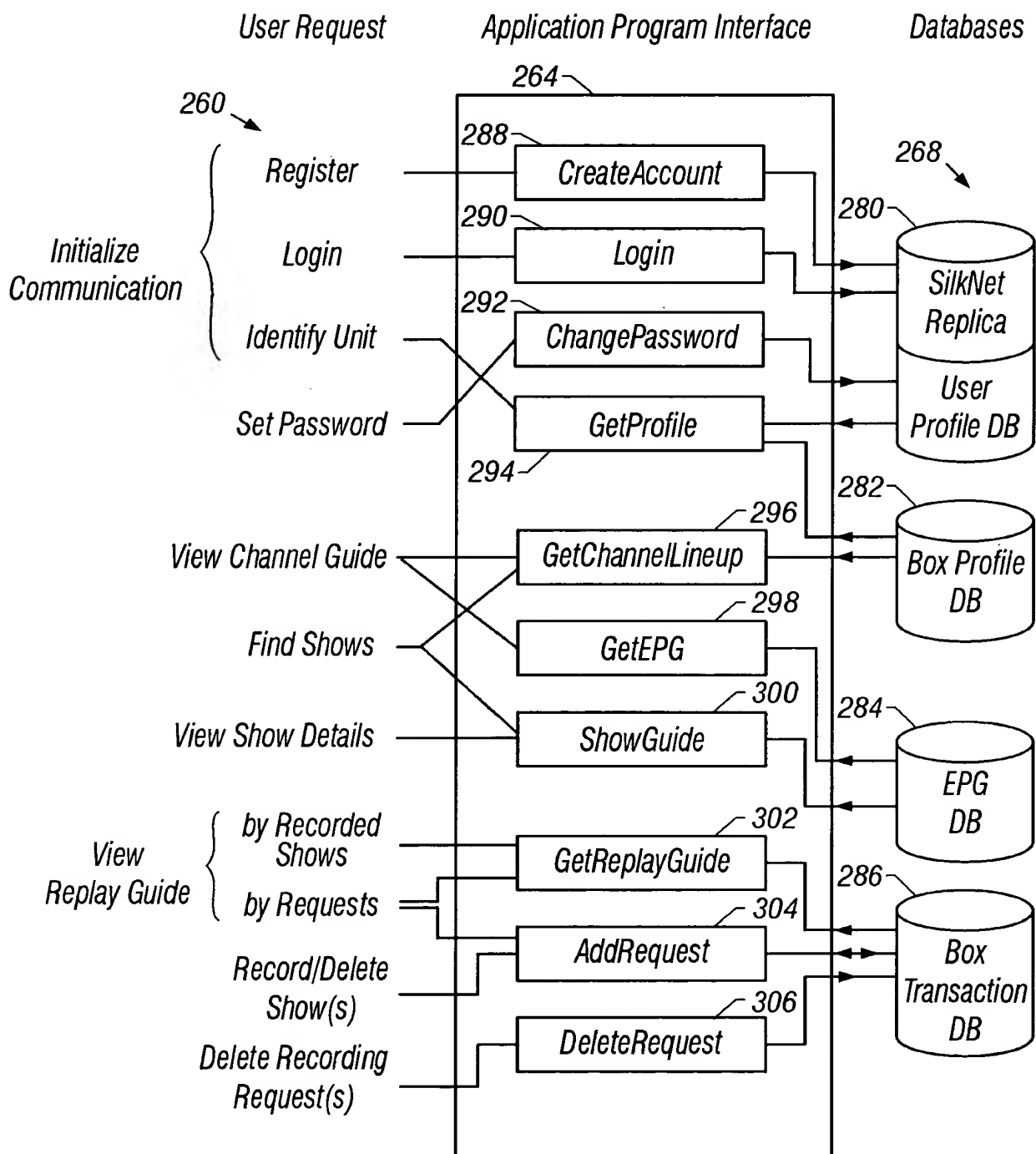


FIG. 16B

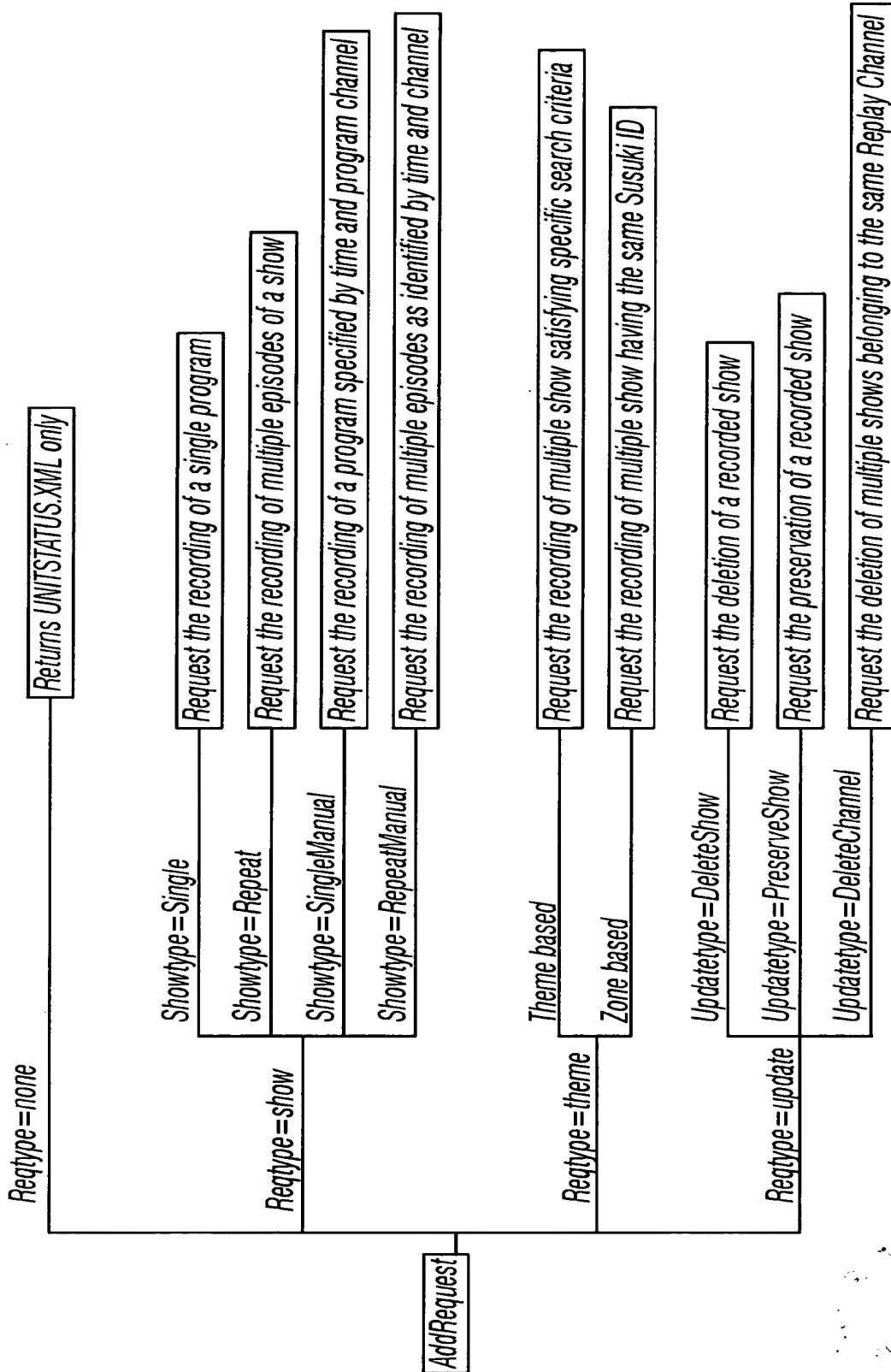


FIG. 17

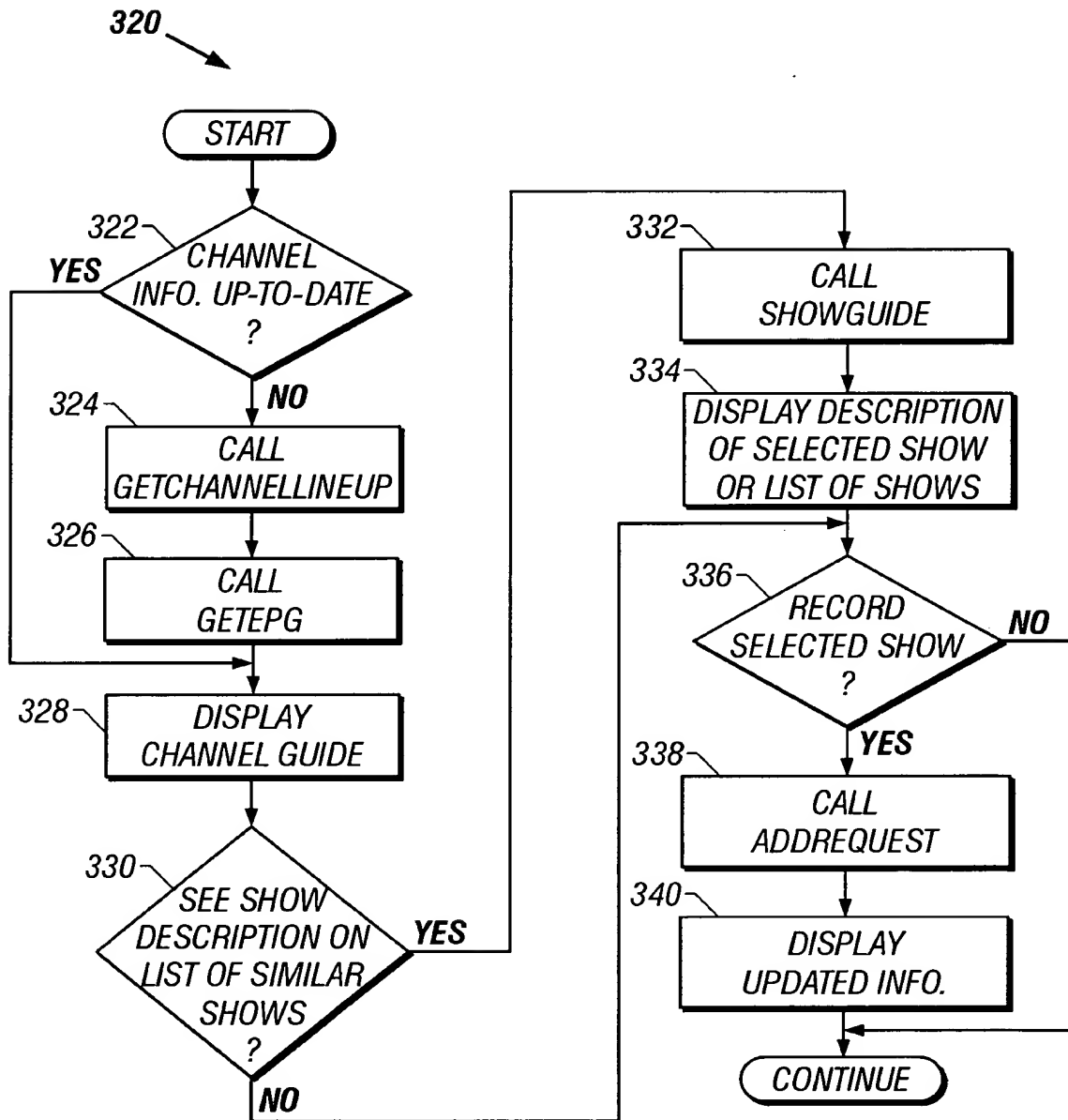


FIG. 18




my  replaytv		Preferences Help Logout
Channel Guide Replay Guide Find Shows Manual Record		
<h2 style="margin: 0;">Replay Guide</h2>		
Replay Shows Replay Channels		350
<p style="text-align: center;"><i>Review and edit your one time and recurring Replay TV requests</i></p> <p>  Delete Selected Channels </p>		
<i>Channel</i>	<i>Details</i>	<i>Status</i>
<input type="checkbox"/> <i>A Fistful of Dollars</i>	<i>This single record Replay channel was scheduled to record A Fistful of Dollars from Channel 21(TBS) on Sun, 02/18 at or around 7:00AM - 9:00AM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.</i>	<i>Request Date</i> 02/18
<input type="checkbox"/> <i>Blown Away</i>	<i>This single record Replay channel was scheduled to record Blown Away from Channel 42(USAP) on Tue, 01/16 at or around 9:00PM - 11:30PM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.</i>	01/16
<input type="checkbox"/> <i>Cantonese News</i>	<i>This show-based Replay channel will continuously record the 1 most current episode(s) of Cantonese News occurring every (Sun, Mon, Tue, Wed, Thu, Fri, Sat) on Channel 8(KTSF) at or around 8:00PM - 9:00PM. Guaranteed at EXTENDED quality.</i>	02/28
<input type="checkbox"/> <i>Captain January</i>	<i>This single record Replay channel was scheduled to record Captain January from Channel 49(AMC) on Tue, 01/09 at or around 3:30AM - 5:00AM. Guaranteed at EXTENDED quality. Nothing else is scheduled to record.</i>	01/09

FIG. 19A

my  replaytv

Channel Guide

Replay Guide

Find Shows

Manual Record

Preferences

Help

Logout


Replay Guide

Replay Shows

Replay Channels

350

Review and edit recordings saved to your Replay TV unit



Delete Selected Channels

Channel	Show Title/Episode	Date/Time	Station	Duration	Size
A Fistful of Dollars	<input type="checkbox"/> A Fistful of Dollars	02/18 7:00AM	21 TBS	(2h)	6.46%
Blown Away	<input type="checkbox"/> Blown Away	01/16 9:00PM	42 USAP	(2h 30m)	8.07%
Captain January	<input type="checkbox"/> Captain January	01/09 3:30AM	49 AMC	(1h 30m)	4.84%
Firewalker	<input type="checkbox"/> Firewalker	02/27 8:00PM	21 TBS	(2h)	6.46%
On Deadly Ground	<input type="checkbox"/> On Deadly Ground	01/07 9:00PM	4 KRON	(2h)	6.46%
Platoon	<input type="checkbox"/> Platoon	02/04 8:00PM	37 TNTP	(2h 30m)	8.07%
The Bridge on the River Kwai	<input type="checkbox"/> The Bridge on the River Kwai	12/24 8:00AM	42 USAP	(3h 30m)	11.30%
The Little Princess	<input type="checkbox"/> The Little Princess	12/26 4:15AM	49 AMC	(1h 45m)	5.65%
The Trouble with Harry	<input type="checkbox"/> The Trouble with Harry	12/18 1:05PM	49 AMC	(1h 55m)	6.19%
Welcome to ReplayTV	<input type="checkbox"/> Welcome to ReplayTV	09/08 10:49AM		(15m)	2.42%

FIG. 19B

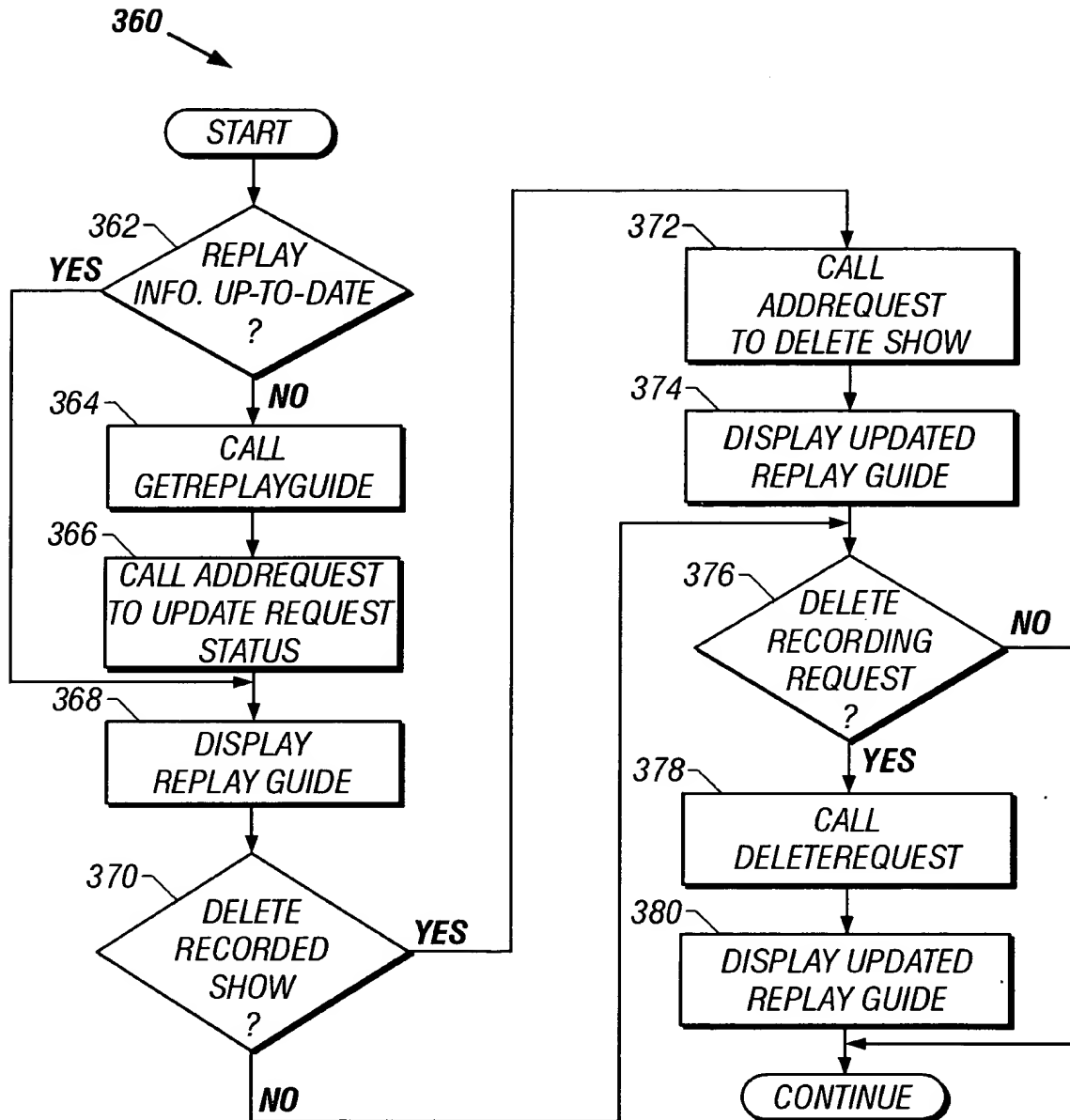


FIG. 20

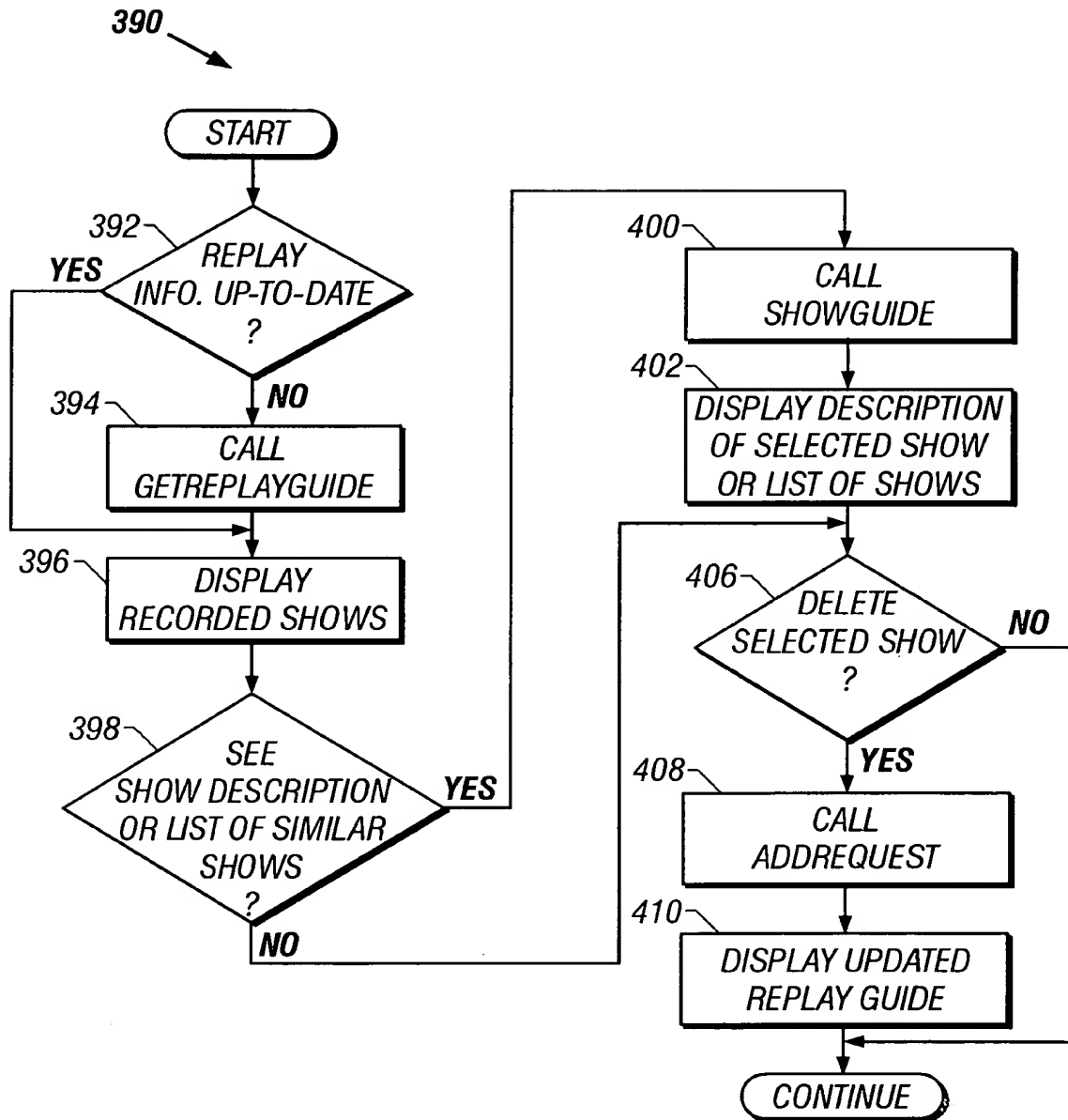


FIG. 21


my  replaytv		Preferences	Help	Logout
Channel Guide		Replay Guide	Find Shows	Manual Record
Find Shows				
<p>Find: <input type="text"/></p> <p>Enter the word or phrase that you wish to find.</p>				
<p>in these categories:</p> <p><input checked="" type="checkbox"/> Show Titles <input type="checkbox"/> Actors</p> <p><input checked="" type="checkbox"/> Descriptions <input type="checkbox"/> Directors</p> <p>Find Shows</p>				
<hr/>				
<hr/>				
Copyright Policy Terms and Conditions Privacy Policy FAQ				

FIG. 22

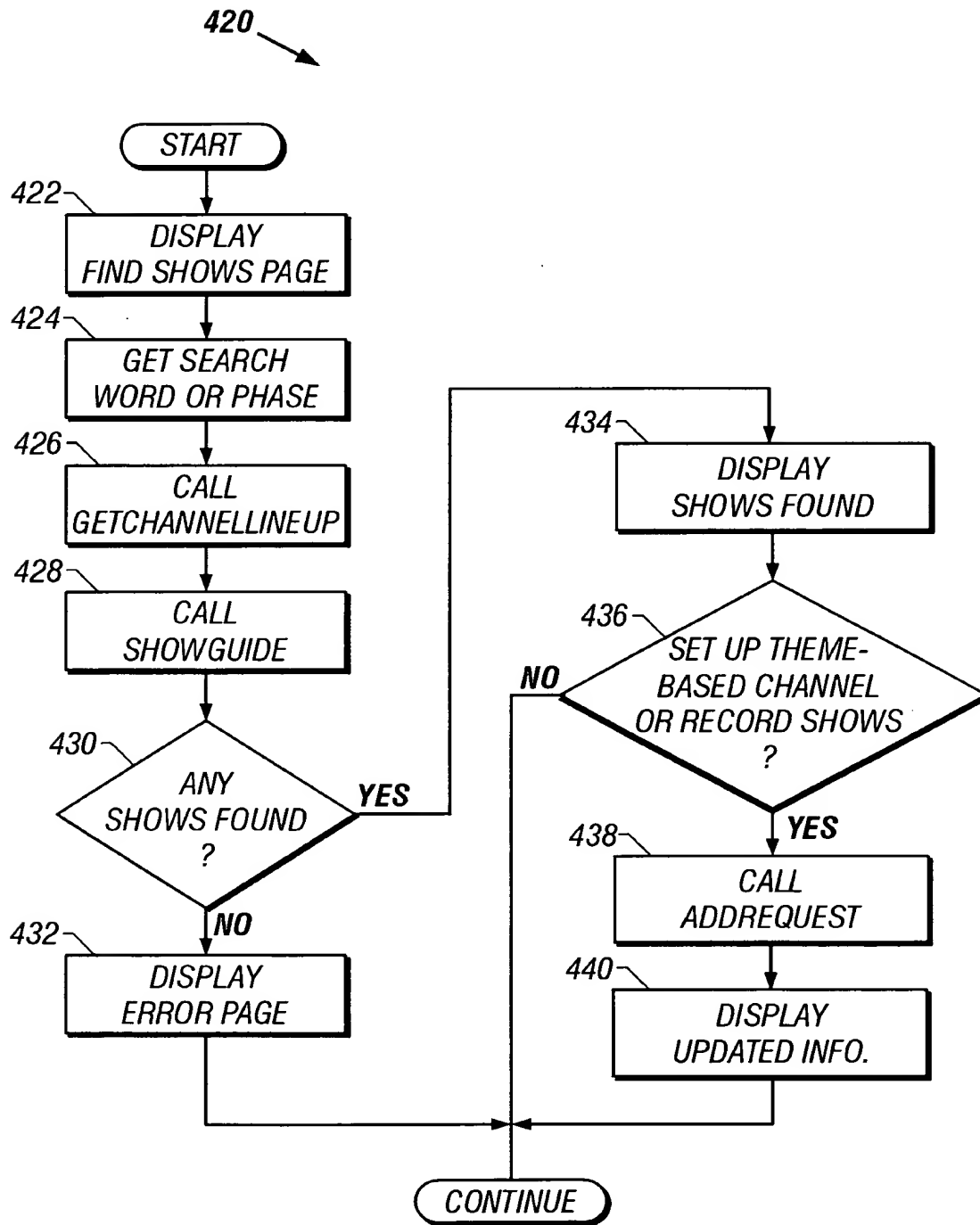


FIG. 23


my  replaytv		Preferences	Help	Logout
		Channel Guide	Replay Guide	Manual Record
Manual Record				
Single Recording Repeat Recording				
Start Date	Mar ▼	7 ▼	2001 ▼	
Start Time	<input type="text"/>	:	AM ▼	} Recording duration:
End Time	<input type="text"/>	:	AM ▼	
Channel	0 OXYGEN ▼			
Quality	Extended ▼			
Guaranteed	Yes ▼			
Submit Request				450
Copyright Policy Terms and Conditions Privacy Policy FAQ				

FIG. 24A

my r replaytv		Preferences	
		Help	
		Logout	
		Channel Guide	Find Shows
		Manual Record	Replay Guide
Manual Record		3h 45m available at medium quality as of last connection	
Single Recording Repeat Recording			
Days	<input type="checkbox"/> Mon <input checked="" type="checkbox"/> Tue <input type="checkbox"/> Wed <input type="checkbox"/> Thu <input type="checkbox"/> Fri <input type="checkbox"/> Sat <input type="checkbox"/> Sun		
Start Time	<input type="text" value="7"/> : <input type="text" value="58"/> <input type="text" value="PM"/>	End Time	<input type="text" value="11"/> : <input type="text" value="02"/> <input type="text" value="PM"/>
Channel	<input type="text" value="4 KRON"/>		
Quality	<input type="text" value="Standard"/>		
Guaranteed	<input type="text" value="Yes"/>		
<input type="button" value="Submit Request"/>			

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FIG. 24B

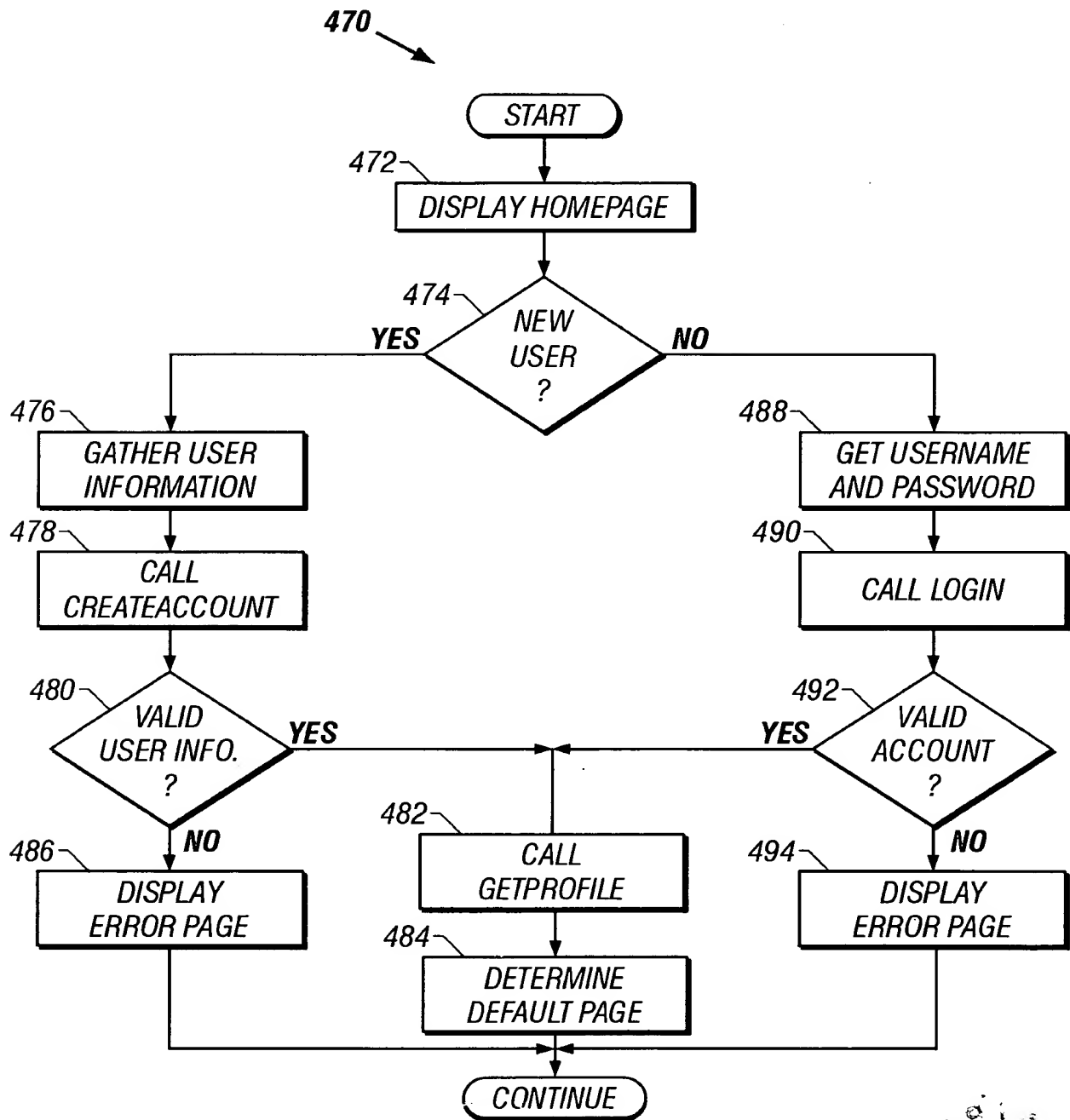


FIG. 26

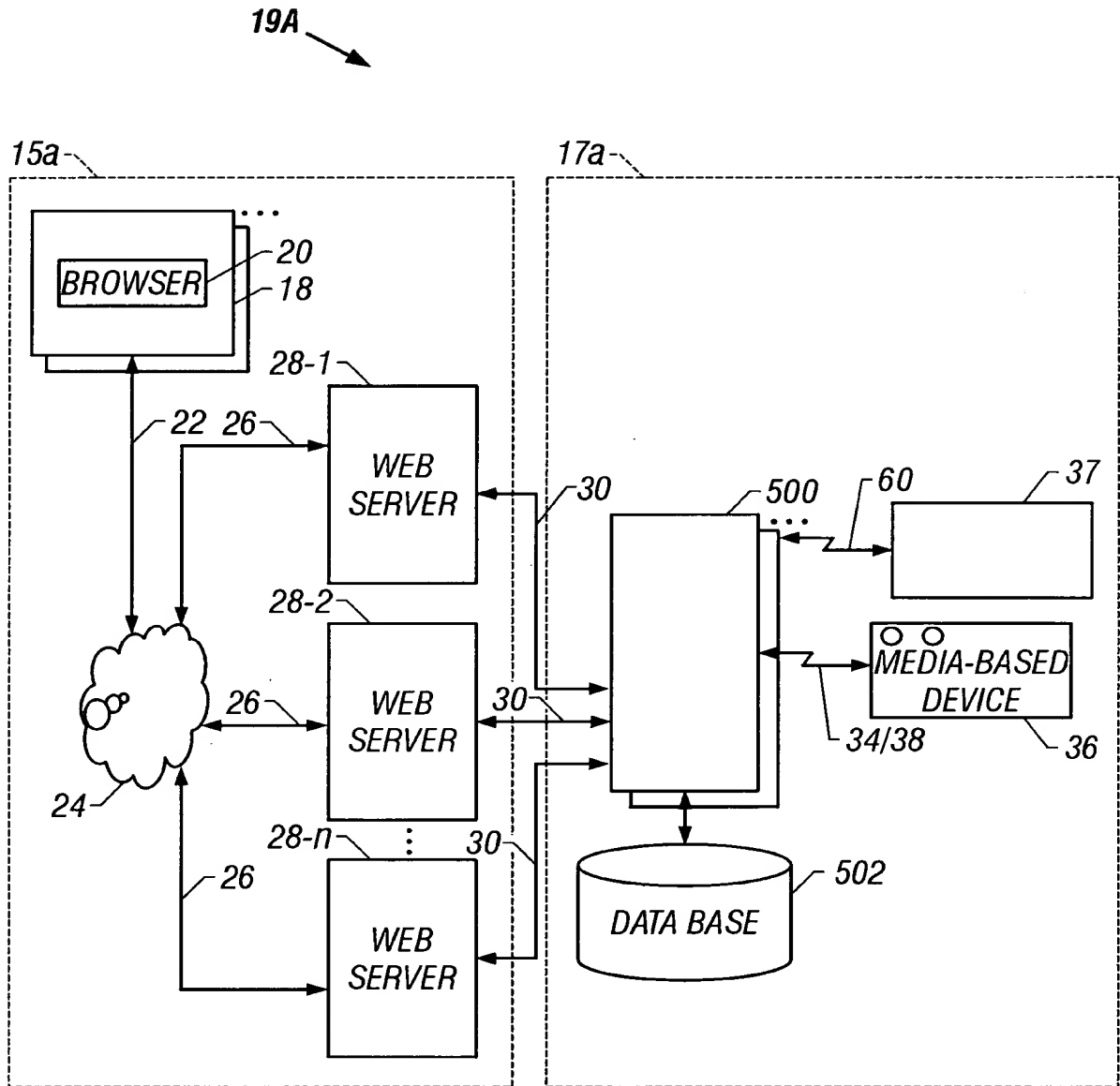


FIG. 27

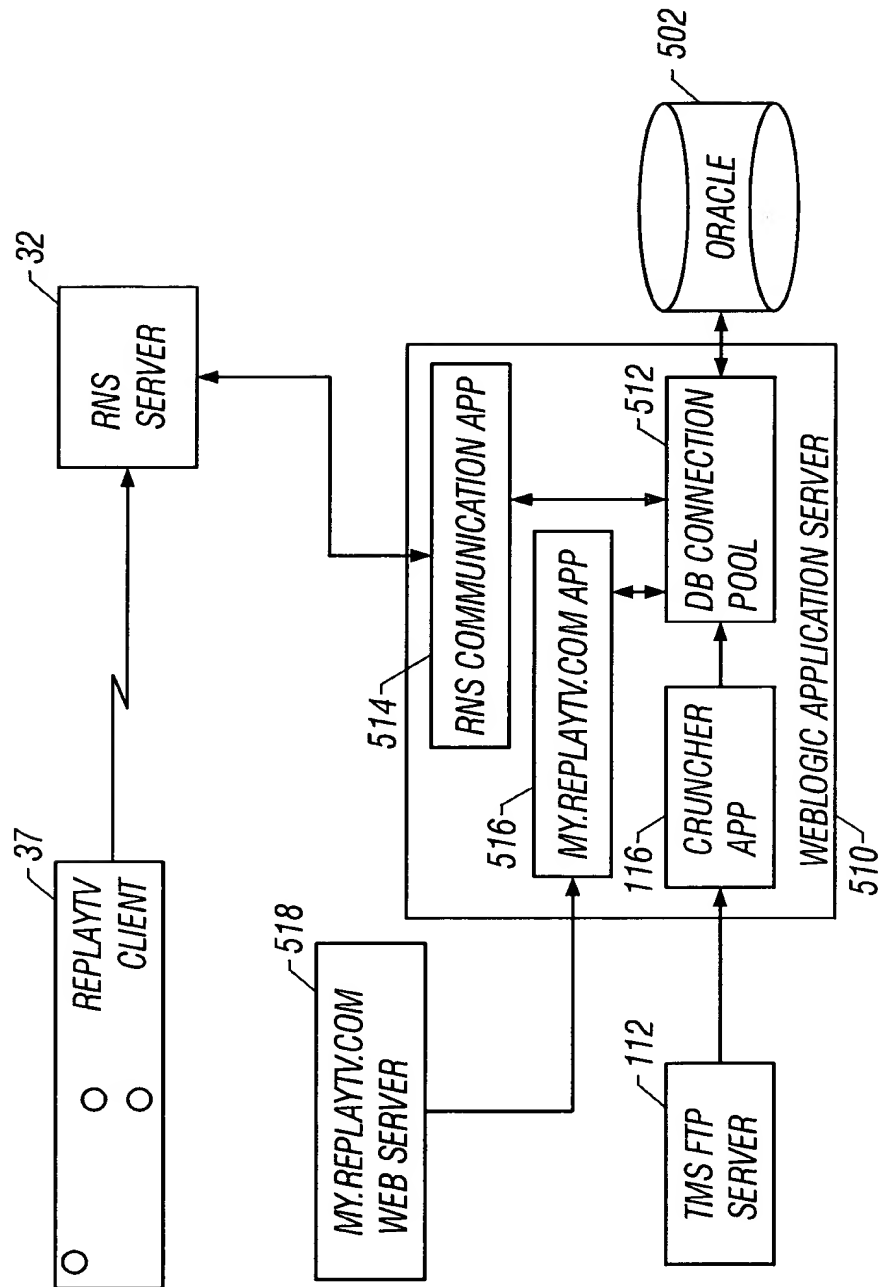
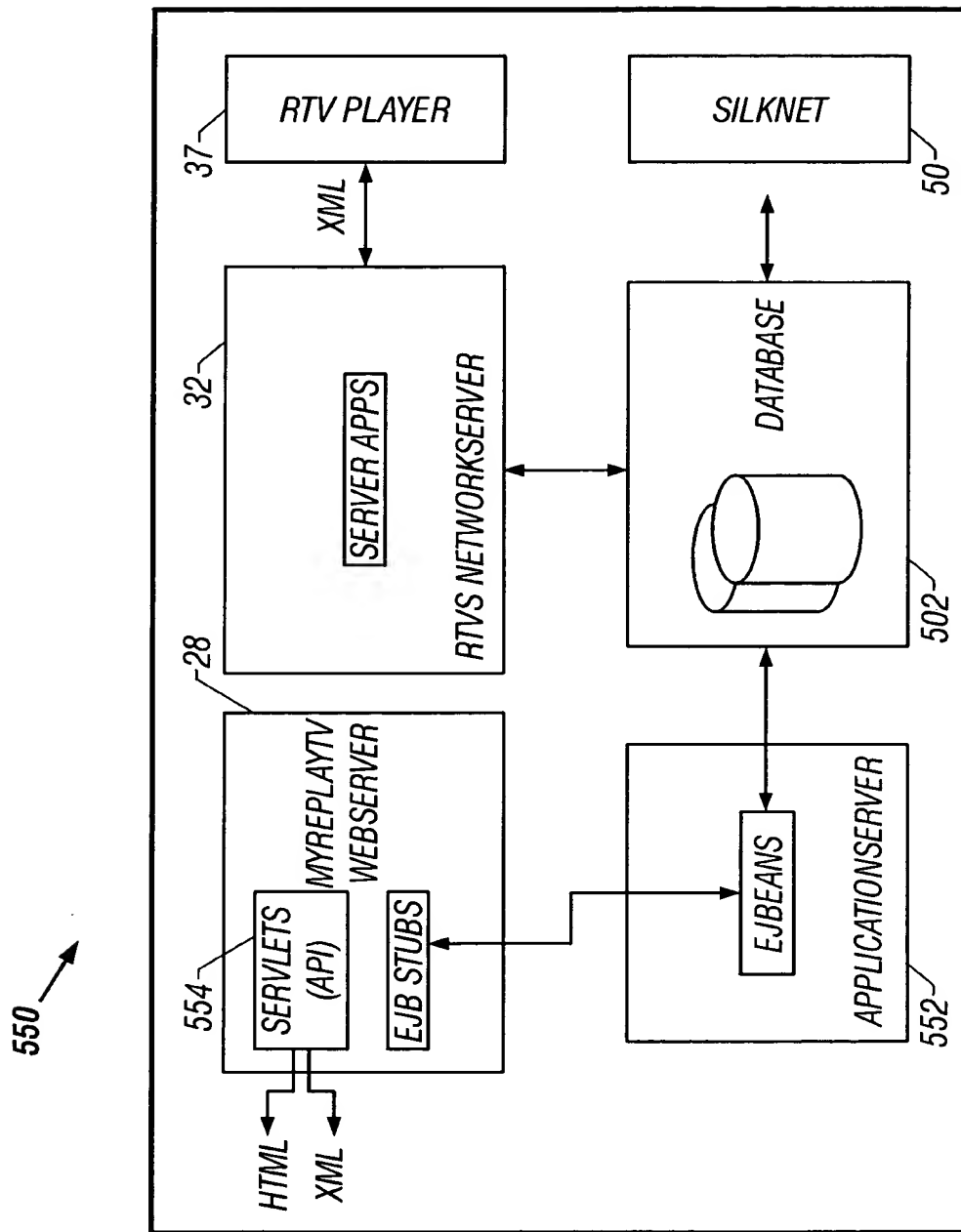


FIG. 28



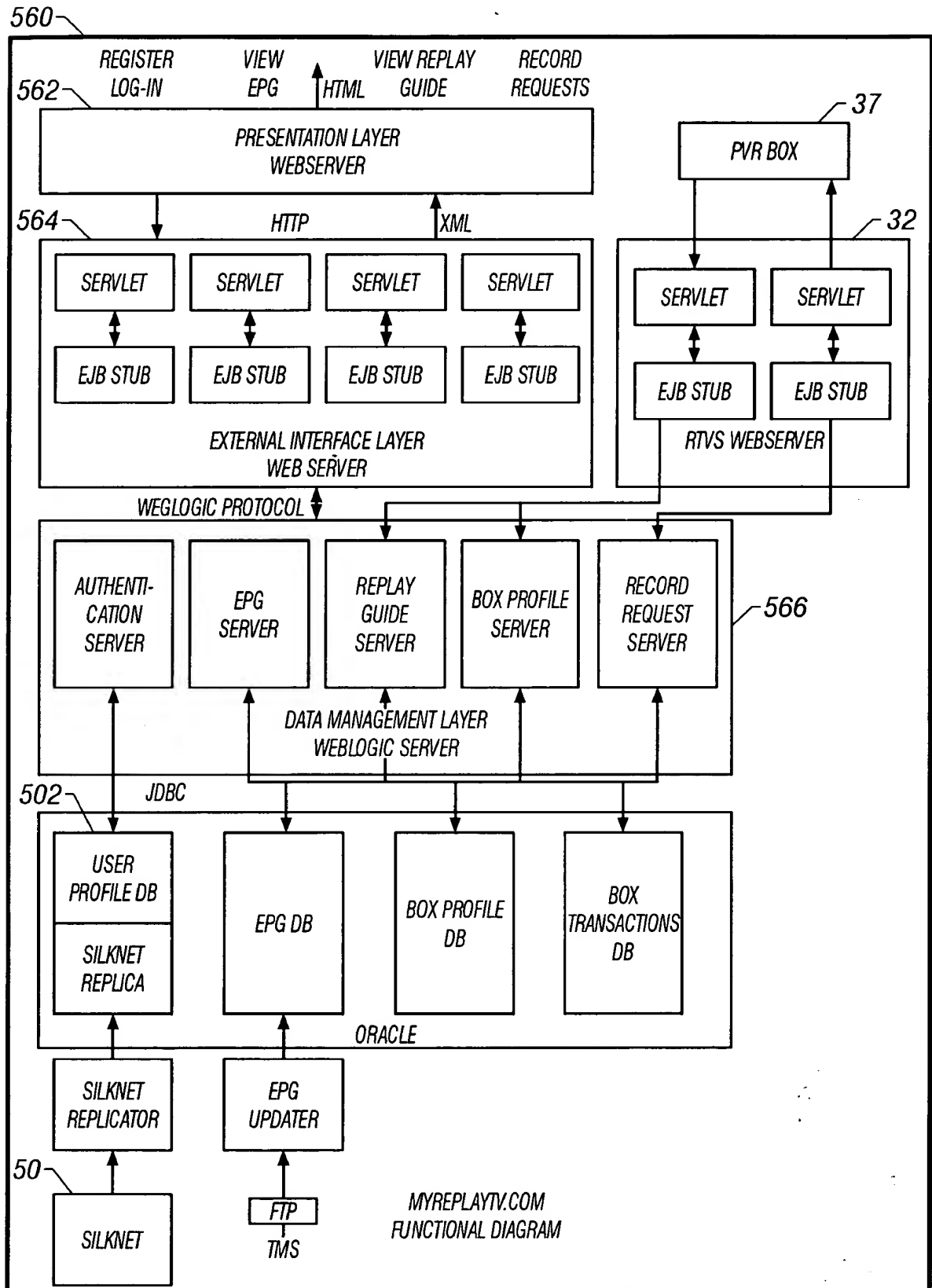


FIG. 30

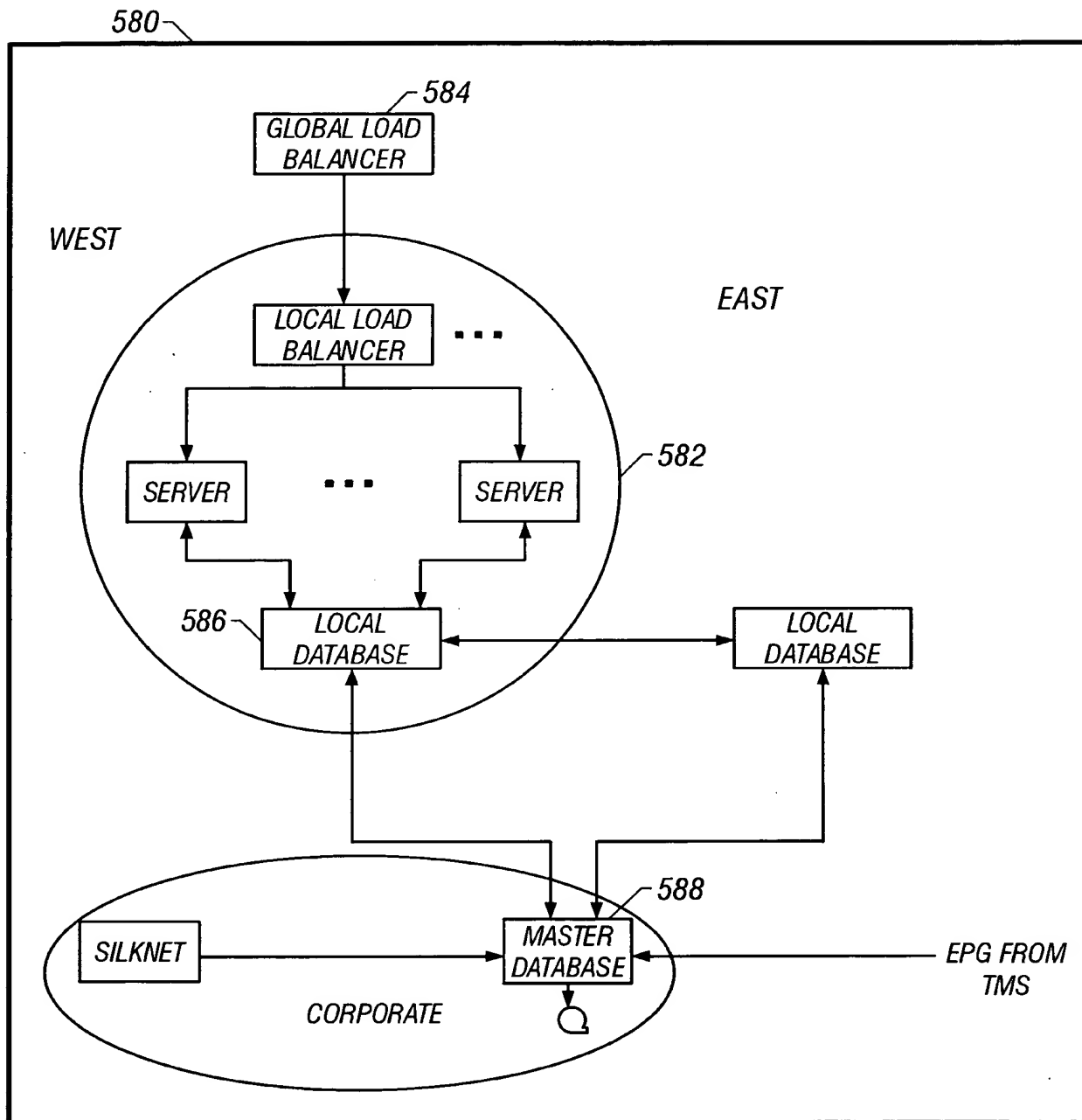


FIG. 31